STREET IMPROVEMENTS FOR

TUNIS CIRCLE

FROM THE NORTH LINE OF 17TH STREET NORTH TO AND INCLUDING CUL-DE-SAC

WESTWOOD HEIGHTS SECOND ADDITION

PROJECT NO.

472-76-245-81353-000-000-001

CITY OF WICHITA, KS

MICHAEL E. LINDEBAK - CITY ENGINEER

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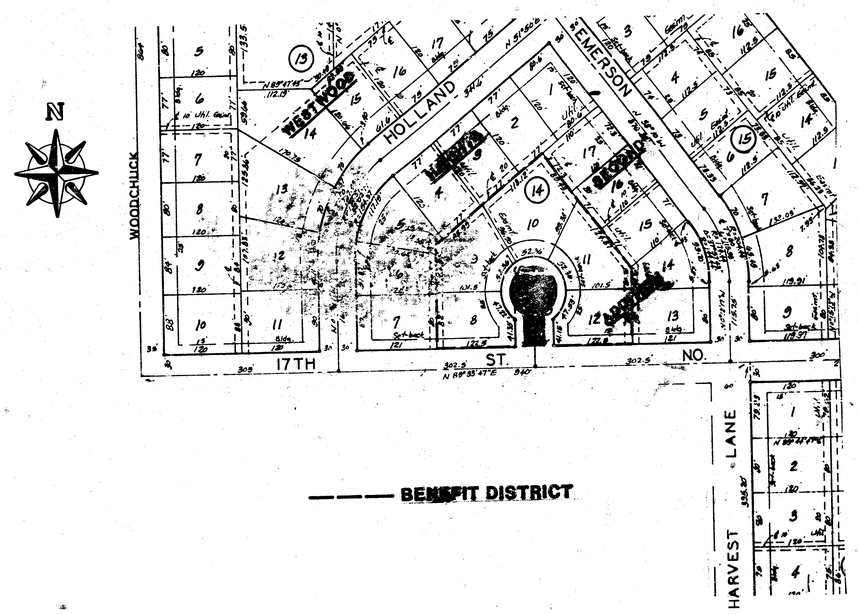


GENERAL NOTES

1. Utility service lines, poles, valve boxes, meters, and etcetera are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities and their location, as shown on the plans, represent the best information obtainable for design. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.

2. Limits of earthwork shall match existing ground elevations at the right-of-way line unless otherwise noted on the plans with a new finished grade elevation. When a new finished grade elevation is shown, the earthwork shall extend one foot beyond the right-of-way line and then sloped up or down using permissable slopes to match the existing ground surface.

3. The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor or a licensed professional engineer in accordance with state laws.

4. No more than 3 drives 20 feet in width, or equivalent combinations thereof, are to be constructed with is project.

BENCH MARKS

1) "D" Cut 2 feet east of existing end of return on the northerly side of Northwest Parkway, located near the west end of Lot 29, Block 11, Westwood Heights 2nd Addition. Elevation = 154.82 City Datum.

2) "D" Cut 5.5 feet west of end of existing curb (east of existing curb inlet) on the south side of 17th Street North, located near the N.E. Corner of Westlink 16th Addition. Elevation = 157.98 City Datum.

N. BRENT WOOTEN LICENSED 8470 KANSAS PROFESSIONAL ENGINEER

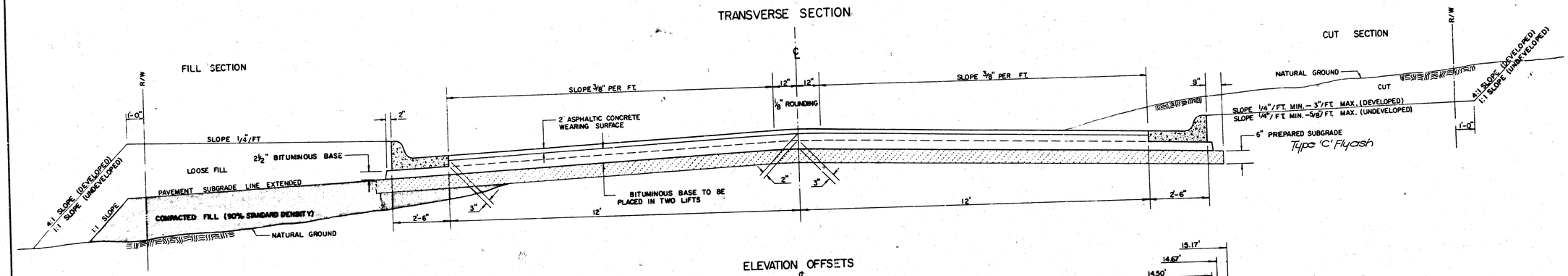
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design:	Drawn:	Approved:	Date:	Scale:	Sheet:	of:
NB Wooten	C. Bohm	RW	July 87'	1"=100'	1	4

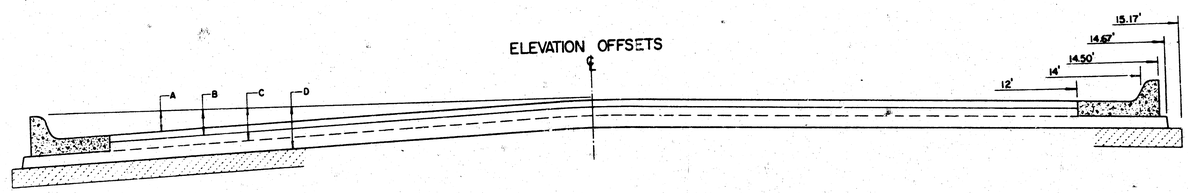
1/4

TYPICAL 29' PAVEMENT DETAILS

TRANSVERSE SECTION

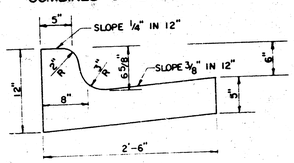


ELEVATION OFFSETS

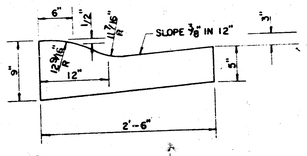


	DISTANCE FROM CENTERLINE (LT. & RT.)											
	0'	2'	4'	6'	7'	8'	10'	12'	14'	14.5'	14.67'	15.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.13	0.18	0.24	0.30	0.33	0.36	0.43	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.30	0.35	0.41	0.47	0.50	0.53	0.60	0.66	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.47	0.52	0.60	0.68	0.71	0.75	0.83	0.90	0.98	1.00	1.01	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.72	0.77	0.84	0.91	0.94	0.98	1.05	1.12	1.19	1.21	1.21	1.23

COMBINED CURB & GUTTER



ROLL TYPE COMBINED CURB & GUTTER



GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.

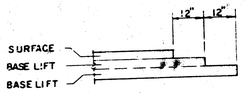
3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

7 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 5 INCH BITUMINOUS BASE

CITY OF WICHITA, KANSAS

PROJECT NUMBER

472-76-245-81653-000-000-001

2/4

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Bench Marks

1) 'O' Cut 2 feet east of existing end of return on the northerly side of Northwest Parkway, located near the west end of Lot 29, Block 11, Westwood Heights 2nd Addition. Elevation = 154.82 City Datum.

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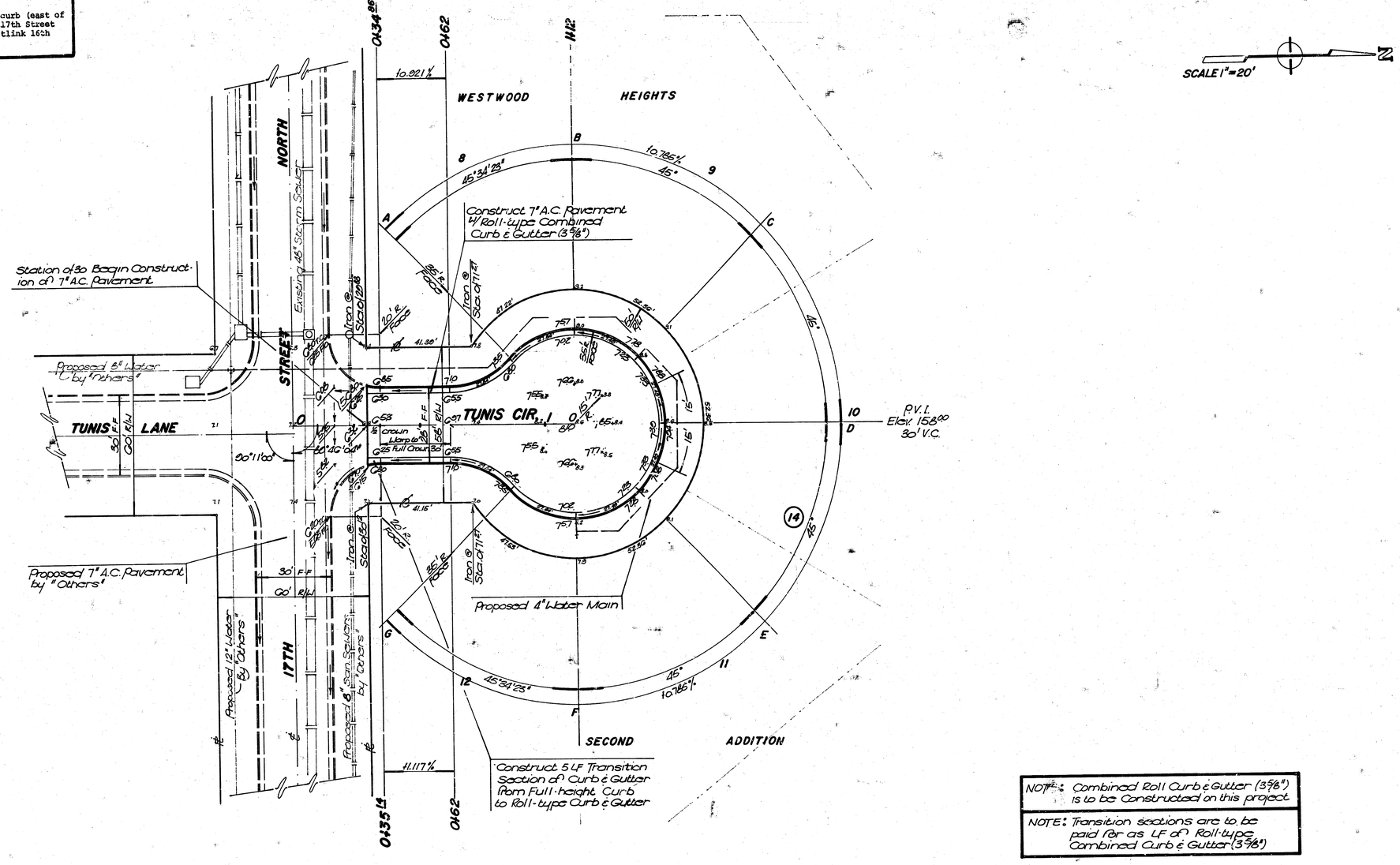


NOTE: Combined Roll Curb & Gutter (3 5/8") is to be Constructed on this project.

NOTE: Transition sections are to be paid for as LF of Roll-type Combined Curb & Gutter (3 5/8")

Earthwork Sections

Excavation 423.5 cy. Compacted Fill 0.0
+10% 42.4 cy.
Total 465.9 cy.

Subgrade Manipulation 684 sy.

Street Improvements For
TUNIS CIRCLE

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

DESIGN	DRAWN	APPROVED	DATE	SCALE	REV.	SHEET	OF
N.B. Waters	R.J. Plush	N.B. Waters	July 87	1" = 20'		3	4 3/4

160

155

$Exc = \frac{1}{27}\left(\frac{50+50}{2}\right)^2 \pi \left(\frac{1.15+1.04}{2}\right) \frac{45°34'23''}{360} = 40.32$ C.Y.

OG @ 51.95 SF Avg 1.04

160

155

$Exc = \frac{1}{27}\left(\frac{50+50}{2}\right)^2 \pi \left(\frac{1.15+1.0}{2}\right) \frac{45}{360} = 39.09$ C.Y.

OF @ 57.40 SF Avg 1.15

160

155

$Exc = \frac{1}{27}\left(\frac{50+51.5}{2}\right)^2 \pi \left(\frac{1.0+1.15}{2}\right) \frac{45}{360} = 40.27$ C.Y.

OE @ 50.9 SF Avg 1.0

160

155

$Exc = \frac{1}{27}\left(\frac{51.75+51.5}{2}\right)^2 \pi \left(\frac{1.38+1.15}{2}\right) \frac{45}{360} = 49.04$ C.Y

OD @ 59.03 SF Avg 1.15

160

155

$Exc = \frac{1}{27}\left(\frac{52.2+51.25}{2}\right)^2 \pi \left(\frac{1.7+1.38}{2}\right) \frac{45}{360} = 60.5$ C.Y.

OC @ 71.64 SF Avg 1.38

160

Existing Ground (Typical)

155

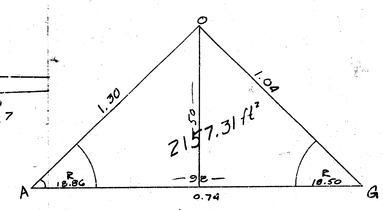
$Exc = \frac{1}{27}\left(\frac{50+52.2}{2}\right)^2 \pi \left(\frac{1.7+1.3}{2}\right)\left(\frac{45°34'23''}{360}\right) = 57.69$ C.Y.

OB @ 88.94 SF Avg 1.7

160

155

OA @ 64.79 SF Avg 1.30



$R = \left(\frac{7.75+20}{2}\right) = 18.86$

$R = \left(\frac{12+20}{2}\right) = 19.50$

$\pi R^2 \left(\frac{45°34'23''}{360}\right) = A_{sect.}$

For $R = 18.86 \rightarrow 141.46\ ft^2$

$R = 19.50 \rightarrow 151.23\ ft^2$

$A_{TOT} = (98 \cdot 50)/2 = 2450\ ft^2$

$Exc = (2157.31\ ft^2)\left(\frac{1.3+1.04+0.74}{3}\right)/27$

$= 82.9$ C.Y.

50 40 30 20 10 0

160

Cut 44.48 Avg 0.74

155

Station of 62

27°

Exc. 45.6 C.Y.

160

Cut 46.67

Station of 35

5°

Exc. 9.9 C.Y.

160

Cut 49

155

Station of 30

30 20 10 0 10 20 30

Tunis Circle

Project Totals

Excavation 423.9 cy.

Comp. Fill 0.0 cy.

Earthwork Section

TUNIS CIRCLE

ACS 4 5 3 1

+/-